Amendment Under 37 C.F.R. § 1.111

U.S. Application No.: 09/699,435

AMENDMENTS TO THE SPECIFICATION

Please replace the paragraph beginning at page 17, line 9 with the following rewritten paragraph:

Attorney Docket No.: Q61542

According to a third aspect of the present invention, there is provided a speech signal decoding method for decoding information concerning an excitation signal and linear prediction coefficients from a received signal, generating the excitation signal and the linear prediction coefficients from the decoded information, and driving a filter, which is constituted by the linear prediction coefficients, by the excitation signal to thereby decode a speech signal, comprising a first step of identifying a voiced speech segment and a noise segment with regard to the received signal using the decoded information; a second step of deriving a norm of the excitation signal at regular intervals in the noise segment; a third step of smoothing the norm using a past value of the norm; a fourth step of limiting the value of the smoothed norm based upon an amount of fluctuation derived from the norm and the smoothed norm; a fifth step of changing the amplitude of the excitation signal in the intervals using the norm and the norm that has been smoothed and limited; and a sixth step of driving the filter by the excitation signal the amplitude of which has been changed.

Please replace the paragraph beginning at page 20, line 20 with the following rewritten paragraph:

According to a 12th aspect of the present invention, the foregoing object is attained by providing a speech signal decoding apparatus for decoding information concerning an excitation signal and linear prediction coefficients from a received signal, generating the excitation signal

Amendment Under 37 C.F.R. § 1.111

U.S. Application No.: 09/699,435

Attorney Docket No.: Q61542

and linear prediction coefficients from the decoded information, and driving a filter, which is constituted by the linear prediction coefficients, by the excitation signal to thereby decode a speech signal, comprising a voiced/unvoiced speech/noise identification circuit identifying a voiced segment and a noise segment with regard to the received signal using the decoded information; an excitation-signal normalizing circuit calculating (deriving) a norm of the excitation signal at regular intervals and dividing the excitation signal by the norm; a smoothing circuit for smoothing the norm using a past value of the norm; a smoothing-quantity limiting circuit limiting the value of the smoothed norm using an amount of fluctuation calculated from the norm and the smoothed norm; and an excitation-signal reconstruction circuit multiplying the smoothed and limited norm by the excitation signal to thereby change the amplitude of the excitation signal in the intervals.

Please replace the first paragraph on page 35 with the following rewritten paragraph:

In a third preferred mode of the present invention, as shown in Fig. 3, a speech signal decoding apparatus is for decoding information concerning an excitation signal and linear prediction coefficients from a received signal, generating excitation signal and linear prediction coefficients from the decoded information, and driving a filter, which is constituted by the linear prediction coefficients, by the excitation signal to thereby decode a speech signal, and the apparatus includes: a voiced/unvoiced identification circuit (2020) for identifying a speech voiced-segment and a noise segment with regard to the received signal using the decoded information; the excitation signal normalizing circuit (2510) for calculating a norm of the



Amendment Under 37 C.F.R. § 1.111

U.S. Application No.: 09/699,435

Attorney Docket No.: Q61542

excitation signal at regular intervals and dividing the excitation signal by the norm; the smoothing circuit (1320) for smoothing the norm using a past value of the norm; the smoothing-Quantity limiting circuit (7200) for limiting the value of the smoothed norm using an amount of fluctuation calculated from the norm and the smoothed norm; and excitation- signal reconstruction circuit (2610) for multiplying the smoothed and limited norm by the excitation signal to thereby change the amplitude of the excitation signal in the intervals. The voice/unvoiced identification circuit 2020 detects speech and noise segments but is referred to as voice/unvoiced identification circuit. Moreover, the Specification may refer to speech segment as a voice segment and noise segment as a "unvoiced" segment.

